

Session 4: "Network and Station Performance"

Chairs: M. Torrence, V. Luceri

- **On-site Data quality control**

Analysis of range bias and true geodetic signals at Herstmonceux

- bias and height signals separated using other on-site geodetic techniques (GNSS, absolute gravity)
- time-of-flight counter effects evident and the cause still under investigation

NGSLR Performance

- Next Generation Satellite Laser Ranging System (NGSLR) collocated with MOBLAS-7 at GGAO to calibrate the NGSLR event timer and processor
- High energy returns used to calibrate the longer-pulse transmit system built for LRO

Quality control tools at MLRO

- cooperation between data analysts, engineers, operators
- control infrastructure and web based information system to enable a constant monitor of the system parameters

Tracking Performance of High Satellites at Mt Stromlo

- laser power upgrade at Mt Stromlo SLR Station
- station operated unmanned in all weather conditions and still at its productivity levels.

• Data quality control at Analysis Centers

Multi-Satellite Daily Bias at HIT-U

- routine quality control system for the ILRS global network provided by the Hitotsubashi University and numerical tables are available via web, ftp and email.
- Stations directly contacted when a bias is evident and encouraged to reply.

LAGEOS data analysis at Changchun

- Data analysis at the Changchun site: a bridge between theoretical research and observational work
- LAGEOS 1/2 RB and TB evaluation

• Network and models

Sub-centimeter SLR precision with SLRF2005/LPOD2005

- Analysis of Jason1, Lageos1/2, and TOPEX SLR data
- Individual SLR station performance and systematic signals evaluated
- Several stations updated in SLRF2005 to obtain LPOD2005

TRF datum and ILRS network geometry

- SLR network geometry considered as a candidate to explain the discontinuity in the SLR scale
- Further investigation will be done using data simulation

TerraSAR-X/TanDEM-X scenario

- In September 2009 TanDEM-X launched to fly with TerraSAR-X in a very close formation
- Difficulties in the tracking shown

Improved Modeling in the SLR analysis standards

- Model update under discussion
- In the near future, a proposal will be done by ILRS to IERS for modification of the analysis standards related to the products contributing to the establishment of the future ITRFxx.